

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/800,010 Confirmation No. : 6813  
Applicant : Minoru KUNIYOSHI, et al.  
Filed : March 15, 2004  
TC/A.U. : Unassigned  
Examiner : Unassigned  
Docket No. : 038788.53357US  
Customer No. : 23911  
Title : ORGANIC-INORGANIC HYBRID GLASSY MATERIALS  
AND THEIR PRODUCTION PROCESSES

**INFORMATION DISCLOSURE STATEMENT  
UNDER 37 C.F.R. §§ 1.97 AND 1.98**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached Form PTO-1449 and/or listed herein and which the Examiner may deem relevant to patentability of the claims of the above-identified application.

**STATEMENT OF RELEVANCE**

The relevance of these references to the subject matter of the present invention is given in the specification of the present invention.

English abstracts are submitted herewith for the references listed on the PTO 1449 as AB-AG and AI-AK.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant submits the following explanation:

Japanese reference number 2003-313300, listed on the PTO 1449 as AA, discloses an organic-inorganic hybrid low-melting-temperature glass and its production process. This glass is produced by using an alkylchlorosilane and phosphorous acid (as starting materials) in the presence of a metal chloride (e.g., tin chloride).

The present Information Disclosure Statement is being filed (1) no later than three months from the application's filing date or (2) before the mailing date of the first Office Action on the merits (whichever is later), and therefore no certification under 37 C.F.R. § 1.97(e) or fee under 37 C.F.R. § 1.17(p) is required.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Lawrence E. Carter", is written over a horizontal line.

J. D. Evans  
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Lawrence E. Carter  
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September 30, 2004

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PTO/SB/08a (08-03)  
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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE STATEMENT BY APPLICANT**  
(use as many sheets as necessary)

Sheet 1 of 2

**Complete if Known**

Application Number	10/800,010
Filing Date	March 15, 2004
First Named Inventor	Minoru KUNIYOSHI
Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	038788.53357US

**U.S. PATENT DOCUMENTS**

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-			
		US-			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
	AA	JP 2003-313300	11-06-2003			
	AB	JP 62-297236	12-24-1987	Asahi Glass Co. Ltd.		AB
	AC	JP 62-223323	10-01-1987	Central Glass Co. Ltd.		AB
	AD	JP 1-183438	07-21-1989	Nippon Telegr. & Teleph. Corp.		AB
	AE	JP 7-126035	05-16-1995	Central Glass Co. Ltd.		AB
	AF	JP 2-137737	05-28-1990	Asahi Glass Co. Ltd.		AB
	AG	JP 2003-95690	04-03-2003	Central Glass Co. Ltd.		AB
	AH	JP 2003-313048	11-06-2003	Central Glass Co. Ltd.		
	AI	JP 2004-43242	02-12-2004	Central Glass Co. Ltd.		AB
	AJ	JP 59-97550	06-05-1984			AB
	AK	JP 2002-512293	04-23-2002			AB

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449B/PTO		<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		<b>Complete if Known</b>	
				Application Number	10/800,010
				Filing Date	March 15, 2004
				First Named Inventor	Minoru KUNIYOSHI
				Art Unit	Unassigned
				Examiner Name	Unassigned
				Attorney Docket Number	038788.53357US
Sheet	2	of	2		

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AL	P.A. TICK, "Water Durable Glasses with Ultra Low Melting Temperatures", Physics and Chemistry of Glasses, December 1984, pp. 149-154, Vol. 25, No. 6	
	AM	KANICHI KAMIYA ET AL., "Preparation of Refractory Oxide Fibers from Metal Alcoholates—Possibility of Fiber Drawing in the Course of Hydrolysis of the Alcoholates," 1976, pp. 1547-1551, 84, 12	
	AN	MASAHIDE TAKAHASHI ET AL., "Synthesis of Organic-Inorganic Hybrid Glasses Through Non-Aqueous Acid-Base Reaction," New Glass, 2002, pp. 8-13, Vol. 17, No. 2	
	AO	HARUKI NIIDA ET AL., "Preparation and Structure of Organic-Inorganic Hybrid Precursors for New Type Low-Melting Glasses," Journal of Non-Crystalline Solids, 2002, pp. 292-299, 306, Elsevier Science B.V.	
	AP	"Annual Meeting of the Ceramic Society of Japan, 2001, March 21, 2001, pp. 193, ISBN 4-931298-31-1	

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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